

Supplement Analysis
for the
Columbia River Basin Tributary Habitat Restoration Project
(DOE/EA -2126/SA-56)

Baldwin Creek Fish Passage and Habitat Enhancement Project
BPA project number 2023-004-00
BPA contract number 94057

Bonneville Power Administration
Department of Energy



Introduction

In December 2020, Bonneville Power Administration (BPA) completed the Columbia River Basin Tributary Habitat Restoration Programmatic Environmental Assessment (DOE/EA 2126) (Programmatic EA). The Programmatic EA analyzed the potential environmental impacts of implementing habitat restoration actions in the Columbia River Basin and its tributaries.

Consistent with the Programmatic EA, this Supplement Analysis (SA) analyzes the effects of the Baldwin Creek Fish Passage and Habitat Enhancement Habitat Enhancement Project (Project), which would implement some of the specific restoration actions assessed in the Programmatic EA in Baldwin Creek in Hood River County, Oregon, to address the limited amount of spawning and rearing habitat for the benefit of Endangered Species Act (ESA)-listed steelhead trout (*Oncorhynchus mykiss*) and coho salmon (*O. kisutch*).

This SA analyzes the site-specific impacts of the Project to determine if the Project is within the scope of the analysis considered in the Programmatic EA. It also evaluates where there is substantial new circumstances or information about the significance of the adverse effects that bear on the analysis presented in the Programmatic EA. The findings of this SA determine whether additional National Environmental Policy Act (NEPA) analysis is needed pursuant to 40 Code of Federal Regulations (CFR) § 1502.9(d) and 10 CFR § 1021 *et seq.*

Proposed Activities

BPA is proposing to fund the Confederated Tribes of the Warm Springs Reservation to implement the Baldwin Creek Fish Passage and Habitat Enhancement Habitat Enhancement Project in partnership with Hood River Watershed Group. The Project area is located exclusively on private land in Baldwin Creek (Figure 1). There is a long history of channel alterations and straightening in Baldwin Creek to accommodate road and highway construction, railroad corridors, and to improve property for agricultural and rural residential development. Logging occurred historically within the Project area and within the Baldwin Creek basin, and logging within the watershed continues to this day. Impacts from past land management activities and development in the Project area include roads that bisect the floodplain and bridge the creek, fill from driveways and buildings in the 100-year floodplain, floodplain clearing for agricultural and rural residential development, and channel alterations to improve agricultural lands.

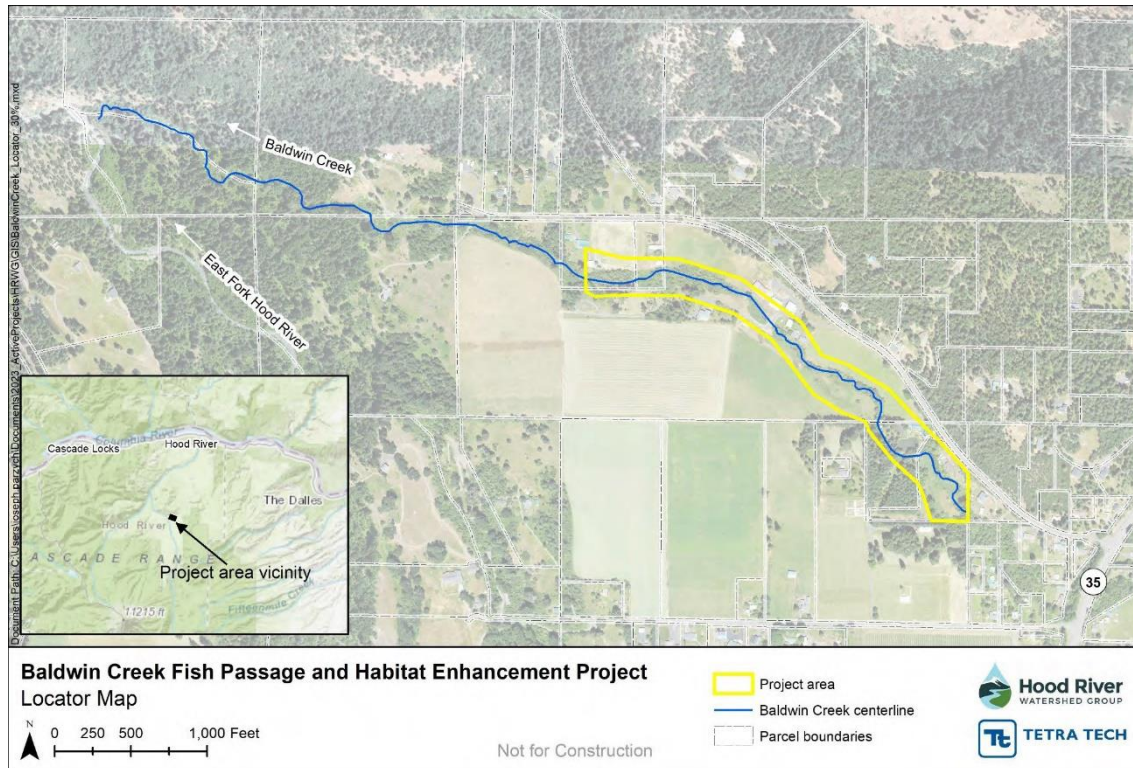


Figure 1. Baldwin Creek Fish Passage and Habitat Enhancement Project Area location map and watershed context.

This Project would take place on Baldwin Creek, a valuable clearwater tributary to the Lower East Fork Hood River located within the Hood River Watershed. The purpose of the Project is to restore aquatic habitat as an aid to the recovery of ESA-listed winter steelhead and coho salmon, as well as resident cutthroat and rainbow trout. A diversion dam and a perched culvert are limiting or blocking passage upstream for all life stages of native fish in the creek. This Project would enhance about 1.3 miles of instream habitat, improve passage to approximately 2 miles of upstream habitat, and reconnect approximately 11 acres of floodplain on Baldwin Creek. This would be accomplished by replacing the undersized, perched culvert with an appropriately-sized stream simulation culvert, creating a roughened channel to eliminate the passage barrier at the diversion dam, reconnecting the floodplain through minor excavation and large wood placement in the main channel, and improving instream habitat with large wood structures.

More specifically, this Project includes the following treatments:

- Large wood structures: A total of 57 large wood structures utilizing 147 whole trees. Three types of large wood structures are proposed: 39 2-log structures, apex structure (four trees), and 17 bank habitat Post-Assisted Logs Structures (PALS; four trees). The structures are designed to provide in-stream and side channel habitat complexity, increase floodplain connectivity, promote split flow conditions, and promote natural processes. The 2-log structures are stabilized through a combination of alluvial backfill, vertical posts, and interweaving between existing trees in the riparian zone. The apex structure is stabilized with vertical posts and include slash and racking material. Bank habitat PALS are stabilized using partial burial and vertical posts.

- Habitat boulder placement: Habitat boulders are proposed in areas that would be treated with large wood structures to improve in-channel complexity and promote micro-habitat development. Habitat boulders would be placed in clusters and targeted in areas with simplified channel geometry (i.e., straight riffle or glide sections of channel) to break up flow and provide refugia for migrating adult and rearing juvenile salmonids.
- Floodplain grading: A combination of 550 feet of high flow side channels, alcoves, and floodplain benching are included to improve floodplain habitat complexity. These features are designed to increase the frequency, size, and complexity of floodplain connectivity. Alcove and high flow swales are designed to activate during frequently experienced high flows (i.e., 5 percent exceedance flow) to provide refugia habitat. Floodplain benches are designed to activate at slightly higher flows (i.e., bankfull to the 2-year flood event) to provide instream habitat heterogeneity and establishment of a diverse riparian community. Floodplain grading is targeted in areas that presented opportunities to improve floodplain function while minimizing impact to existing riparian habitats.
- Culvert replacement: The Project includes replacing the existing 7-foot diameter corrugated metal pipe culvert with an about 16-foot-span (width) by 5-foot rise (height) Aluminum Box Culvert (ALBC). The ALBC is a bottomless arch culvert with streambed substrate placed beneath the crossing structure. The length of the ALBC is approximately 27 feet and would have headwalls at each terminus. The ALBC would be installed on reinforced concrete footing foundations.
- Constructed riffle grade control and removal of fish passage barrier diversion structures: An about 115-foot-long constructed riffle grade control would be installed at the upstream end of the Project area to maintain the ability to utilize the existing diversion ditch. The existing ecology block and stone-and-mortar diversion structures would be removed and replaced with the constructed riffle. This feature would include a mixture of streambed cobble and sediment with finer material washed into the riffle to seal the bed. The constructed riffle would include a low flow fish passage channel to provide fish passage at low flow conditions. Boulders would be utilized within this feature to provide additional stability.
- Revegetation: Revegetation would occur in all areas disturbed by grading, and areas targeted for vegetation management. The planting plan includes three planting zones; wetland, riparian, and upland. The wetland planting zone is located between the active channel and the 2-year flood inundation extent. This zone would be densely planted with hydrophytic species such as willow (*Salix* spp.) and dogwood (*Cornus alba*) that are expected to grow rapidly and provide shade within a few years to aid in ongoing reed canary grass (*Phalaris arundinacea*) management activities performed by HRWG. The riparian planting zone is located between the wetland zone and the 5-year flood inundation extent. The riparian planting zone includes a mixture of trees and shrubs, and species suited to slightly drier conditions compared to the wetland zone. The upland planting zone includes both trees and shrubs species that are adapted to drier conditions. Seed mixes have been included for each zone with tolerances suited to the specific zone.

Disturbance at the Project sites would be approximately 11 acres from excavation and temporary access routes used to install the large wood structures, implement the culvert replacement, and implement roughened riffle construction at the diversion site. Native vegetation would be salvaged for replanting or used to supplement constructed large wood habitat structures to the extent practicable. Disturbance to larger trees (> 6-inch diameter at breast height) would be avoided where feasible. All disturbed areas would be re-vegetated with native riparian vegetation.

In-water construction would take place during the permitted in-water work window of July 15th – August 31st, and would require dewatering work areas for large-wood habitat structures, riffle, and culvert work. Cofferdams would be installed to isolate the in-water work from active flow and fish salvaged and immediately released upstream before dewatering the work area. A diversion channel would be prepared to provide passage during culvert and riffle installation. Upon completion of in-water work, water would be reintroduced in a controlled manner to reduce turbidity.

Although work is expected to be completed in 2024 there may be additional work needed to address issues identified after construction that would be addressed in accordance with the Project’s adaptive monitoring and management plan.

These actions would support conservation of ESA-listed species considered in the 2020 ESA consultations with National Marine Fisheries Service on the operation and maintenance of the Columbia River System and BPA’s commitments to the Confederated Tribes of the Warm Springs Reservation of Oregon under the 2020 Columbia River Fish Accord Extension agreement, while also supporting ongoing efforts to mitigate for effects of the FCRPS on fish and wildlife in the mainstem Columbia River and its tributaries pursuant to the Pacific Northwest Electric Power Planning and Conservation Act of 1980, 16 U.S.C. 839 *et seq.*

Environmental Effects

The typical environmental impacts associated with the Columbia River Basin Tributary Habitat Restoration Project are described in Chapter 3 of the Programmatic EA, and are incorporated by reference and summarized in this document. Implementation of this Project would require the use of heavy equipment for staging, hauling, and excavation, and placement of large wood structures, culvert replacement, side channel creation, and riffle construction. All of these restoration actions during construction would disturb and displace soil in and along the stream, damage vegetation, create noise and vehicle emissions, stress fish, and temporarily increase vehicle traffic and human activity in the Project area. The typical effects associated with the environmental disturbances created by these actions are described in Chapter 3 of the Programmatic EA and are incorporated by reference and summarized in this document.

Below is a description of the potential site-specific effects of the Project, and an assessment of whether these effects are consistent with those described in the Programmatic EA. Because the Project is designed to improve both aquatic and riparian habitats for the long term, adverse effects from soil and vegetation disturbance and human and mechanical activity would be short-term effects only.

1. Fish and Aquatic Species

The effects of using mechanized equipment and manually working in and along Baldwin Creek are consistent with the analysis in Section 3.3.1 of the Programmatic EA (“Fish and Aquatic Species”). Section 3.3.1.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Fish and Aquatic Species”) describes overall low impacts to fish and aquatic species after considering moderate short-term adverse effects and beneficial long-term effects.

Steelhead trout and coho salmon are ESA-listed species and present within the Project area. Consultation on the Project’s effects on these species was completed under BPA’s Programmatic Fish and Wildlife Habitat Improvement Program (HIP) consultation, which concluded that the Project would likely adversely affect these species and their critical habitat in the short term but would not likely result in jeopardy to the species or destruction or adverse modification of their critical habitat. No other wildlife species listed under the ESA or other state-listed or sensitive wildlife species are present within the Project area.

In the short term, the Project would expose, displace, reconfigure, or compact earth through the use of mechanized equipment within and along Baldwin Creek and likely create conditions where sediment would be released for a short period of time following construction activities. Only a moderate amount of sediment is anticipated to be released by the Project because there would be instream excavation, dewatering, and reintroduction of flows over newly exposed soils and gravels. However, mitigation measures detailed in Appendix B of the Programmatic EA for work area isolation and fish salvage would be applied, minimizing these impacts. The sediment inputs would be consistent with the amounts evaluated in Section 3.3.1.2.1 of the Programmatic EA (“Short-Term Effects to Fish and Aquatic Species from Construction Activities”).

The work area isolation, fish salvage, dewatering, and instream construction activity would displace fish from the work area until it is re-watered. Small aquatic organisms that could not be practically salvaged would likely be destroyed. The newly constructed in-stream environment would be re-colonized by fish and other aquatic organisms, with nearly all fish likely returning in a matter of hours to days, and with full returns likely following the seasonal flushing flows. The anticipated amount of activity and the level of aquatic species disturbance, however, is consistent with the analysis in Sections 3.1.3.1 and 3.3.1.2.1 of the Programmatic EA (“Dewatering for Instream Work” and “Short-Term Effects to Fish and Aquatic Species from Construction Activities,” respectively). Specifically, those sections of the Programmatic EA disclosed direct, harmful, and sometimes fatal impacts to aquatic species, including displacement of fish from their preferred habitat during periods of movement, sounds, and vibrations from human and mechanical activity. The Project’s long-term beneficial effects include creation of more complex habitats through the addition of alcoves and side channels, woody vegetation, and boulders to the stream and adjacent riparian areas and the enhancement of in-stream habitat complexity over time by providing large wood structures and overhanging vegetation (tree transplants). These beneficial effects are consistent with the analysis in Section 3.3.1.2.2.2 of the Programmatic EA (“River, Stream, Floodplain, and Wetland Restoration and Channel Reconstruction (Category 2) Effects on Aquatic Species”).

The Project’s long-term beneficial effects include the enhancement of in-stream habitat complexity. These beneficial effects are consistent with the analysis in Section 3.3.1.2.2.2 of the Programmatic EA (“River, Stream, Floodplain, and Wetland Restoration and Channel Reconstruction (Category 2) Effects on Aquatic Species”). The effects to fish species from Project activities would be moderate in the short term and beneficial in the long term. Taken together, the overall effects on fish from Project activities would therefore be low, consistent with the Programmatic EA.

2. Water Resources

The effects of using mechanized equipment and manually working in and along Baldwin Creek are consistent with the analysis in Section 3.3.2 of the Programmatic EA (“Water Resources”). Section 3.3.2.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Water Resources”) describes overall low impacts to water quality after considering moderate short-term adverse effects and beneficial long-term effects. Section 3.3.2.2.1 of the Programmatic EA analyzes effects on water quantity. There would be no effect to overall water quantity as a result of these Project activities. The Project activities would cause minor changes to the existing hydrology in Baldwin Creek.

Overall, the Project would create localized short-term sediment inputs from reintroducing stream flows onto exposed gravels. This would be a temporary impact that may last a few hours. As described in the Programmatic EA, this impact would be lessened by the application of mitigation measures such as slow or metered placement of materials and close monitoring to keep sediment below 50 Nephelometric Turbidity Units as much as possible. The project would add or remove features that increase the functionality of Baldwin Creek and its floodplain. Long term effects of the Project include increased habitat quality and quantity, reduced in-stream temperatures, and an increased potential for the river to

maintain flows conducive for passing all life stages of salmonids. The short-term adverse effects and long-term beneficial effects are consistent with those described in the Programmatic EA, and the overall effects on water quality would be low.

3. Vegetation

The effects of using mechanized equipment and manually working in and along Baldwin Creek are consistent with the analysis in Section 3.3.3 of the Programmatic EA (“Vegetation”). Section 3.3.3.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Vegetation”) describes overall moderate impacts to vegetation after considering moderate short-term adverse effects and beneficial long-term effects. No ESA-listed or other sensitive plant species are present within the Project area.

The Project is anticipated to have impacts consistent with those described in the Programmatic EA. Vegetation along access routes and at excavation locations would be crushed or excavated by heavy machinery during construction, and all impacted sites would be planted or seeded. Section 3.3.3.2 of the Programmatic EA (“Environmental Consequences for Vegetation”) evaluated constructed features that generally disturbed less than 20 acres in a single year, but on occasion would disturb more than 50 acres. In this case, the area impacted by this action would be about 11 acres. Revegetation efforts include using a suite of species designed for increased survival and growth in either the wetland, riparian, or upland planting zone that would result in a long-term benefit to the Project area’s vegetative community. This level of effect would be moderate, as considered by the Programmatic EA.

4. Wetlands and Floodplains

The effects of using mechanized equipment and manually working in and along the Baldwin Creek are consistent with the analysis in Section 3.3.4 of the Programmatic EA (“Wetlands and Floodplains”). Section 3.3.4.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Wetlands and Floodplains”) describes overall low impacts to wetlands and floodplains after considering short-term adverse effects and beneficial long-term effects.

The Project is anticipated to have impacts similar to those described in the Programmatic EA. Specifically, there would be short-term (i.e., weeks-long) adverse effects to floodplains, as there would be about up to 11 acres of earthmoving, including disturbance to approximately 3.5 acres of wetlands from side channel, riffle, and LWD installations. The Confederated Tribes of the Warm Springs Reservation of Oregon would obtain appropriate Clean Water Act permitting prior to work within wetlands. Consistent with the Programmatic EA, Project implementation would also have long-term beneficial effects. It would create conditions in this stream reach with increased connectivity to the floodplain and more diverse wetland vegetative conditions. These would increase the amount and quality of wetlands in the Project area. Appropriate Clean Water Act permitting would be obtained prior to any waterbody disturbance. This level of effect would be low after considering short-term adverse effects and beneficial long-term effects, as stated in the Programmatic EA.

5. Wildlife

The effects of using mechanized equipment and manually working in and along the Baldwin Creek are consistent with the analysis in Section 3.3.5 of the Programmatic EA (“Wildlife”). Section 3.3.5.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Wildlife”) describes overall low impacts to wildlife after considering short-term adverse effects and beneficial long-term effects. Hood River County has the potential to contain ESA-listed northern spotted owl (*Strix occidentalis caurina*) and critical habitat (USFWS Information for Planning and Consultation (IPaC), 2024), but suitable habitat is not located within or near the Project site, and the Project would thus have no effect on ESA-listed wildlife species. No other ESA-listed, state-listed, or other sensitive wildlife species are present within the Project area.

The Project's short-term effects would be consistent with, though less than, those analyzed in the Programmatic EA. There would be approximately 11 acres of wildlife habitat disturbance, whereas the Programmatic EA evaluated habitat disturbances that generally disturbed less than 20 acres in a single year, but on occasion would disturb more than 50 acres. The actions of humans and machines in this area would temporarily (up to about 4 weeks) displace wildlife from their preferred locations and prevent them from reoccupying the site until construction activity has ceased, at which point that habitat would be more hydrologically diverse, but vegetatively similar. This level of effect would be low after considering short-term adverse effects and beneficial long-term effects, as stated in the Programmatic EA.

6. Geology and Soils

The effects of using mechanized equipment and manually working in and along Baldwin Creek are consistent with the analysis in Section 3.3.6 of the Programmatic EA ("Geology and Soils"). Section 3.3.6.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Geology and Soils") describes moderate impacts to geology and soils.

The Project is anticipated to have impacts consistent with those described in the Programmatic EA. Staging, hauling, and constructing large wood structures, side channels, and riffles, floodplain grading, and culvert removal along Baldwin Creek would cause soil displacement, compaction, and the mixing of soil horizons. The Programmatic EA considered actions that generally disturbed less than 20 acres in a single year, but on occasion would disturb more than 50 acres. The area impacted by this action would likely be only about 11 acres. Design criteria, mitigation measures, and best management practices would all be applied as described in Section 2.4 of the Programmatic EA ("Mitigation Measures and Design Criteria") to minimize impacts and maintain long-term productivity of soils.

The Project does not specifically target soils for restoration or enhancement (as it does fish habitat and hydrologic functions), but the proposed actions could result in maintaining and improving soil properties and functions as hydrologic function is restored within the floodplain.

In summary, the effects of the proposed actions on soil and geology could be moderate in the short-term, the overall impacts from project actions on soils and geology to moderate, consistent with the conclusions of the Programmatic EA. There would be a positive impact to soils in the long term.

7. Transportation

The Project's effects in and along Baldwin Creek are consistent with the analysis in Section 3.3.7 of the Programmatic EA ("Transportation"). Section 3.3.7.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Transportation") describes low impacts to transportation.

The Project, though adjacent to Baldwin Creek Drive, would not impact any public roads, either open or closed. The culvert replacement would temporarily block a paved access located on private property. No public roads would be closed, temporarily blocked, or relocated, nor would any work be conducted from the highway or its shoulders. Access to the Project would be obtained via existing roads, and vehicles transporting workers and equipment to Project sites would share local roads with other traffic during construction, which would last less than 4 weeks during normal business hours, and would not affect traffic patterns. This level of impact would be low, as stated in the Programmatic EA.

8. Land Use and Recreation

The effects of the proposed Project in and along Baldwin Creek are consistent with the analysis in the Programmatic EA, Section 3.3.8, "Land Use and Recreation." The Programmatic EA, Section 3.3.8.3, states that overall effects on land uses and recreation would be low to moderate.

There would be no effect on land use or recreation from the Project. The property is privately owned and is used as a residence and for agriculture, and all work is taking place in the existing floodplain. Land uses would not change, nor would public recreational opportunity on this private property be diminished, given that the lands are not open to public use. This level of effect is consistent with that described in Section 3.3.8.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Land Use and Recreation”), which states that land use practices underlying Project sites would not be changed for most projects.

9. Visual Resources

The Project’s effects in and along Baldwin Creek would be consistent with the analysis in Section 3.3.9 of the Programmatic EA (“Visual Resources”). Section 3.3.9.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Visual Resources”) describes low impacts to visual resources.

The proposed restoration actions are immediately adjacent to Baldwin Creek Drive, and some activities would be readily visible to travelers along this route. As described in Section 3.3.9.2 of the Programmatic EA (“Environmental Consequences for Visual Resources”), Project-related construction would accordingly result in some short-term visual impacts, including some disturbance that detracts from the view and the visible presence of newly planted grasses, forbs, and shrubs. However, these visual impacts would last for only a few weeks during staging, construction, and replanting. When construction is complete, the river would gradually appear less disturbed as the newly planted seeded grasses and forbs grow. Within a year or two, the matured vegetation would provide the same natural scenery that can be seen elsewhere along this road. This level of impact would be low, as stated in the Programmatic EA.

10. Air Quality, Noise, and Public Health and Safety

The Project’s effects in and along Baldwin Creek would be consistent with the analysis in Section 3.3.10 of the Programmatic EA (“Air Quality, Noise, and Public Health and Safety”). Section 3.3.10.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Air Quality, Noise, and Public Health and Safety”) describes low impacts to air quality, noise, and public health and safety. In the short term, although landowners immediately adjacent to the Project may hear some construction noise during the few weeks of construction activities, this would only occur during normal working hours. Residents of the small town of Odell, Oregon—located approximately two miles from the Project area—would be too far away for construction-related noise, dust, or exhaust to affect them. In the longer term, the Project would not result in any new sources of emissions or noise. Although some potential safety impacts are anticipated from workers sharing roads when travelling to and from work sites and from visual distractions that construction work may create for passing motorists on the nearby Baldwin Creek Drive, the Project has a small potential to impact public safety infrastructure (e.g., roads, telecommunications equipment, etc.) or to burden emergency services (e.g., police, fire, and emergency medical services). This level of impact would be low, as stated in the Programmatic EA.

11. Cultural Resources

The Project’s effects are consistent with the analysis in Section 3.3.11 of the Programmatic EA (“Cultural Resources”). Section 3.3.11.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Cultural Resources”) describes low impacts to cultural resources, with any potential effects being amenable to resolution through the Section 106 consultation process under the National Historic Preservation Act.

BPA conducted a cultural resource survey and consulted with the Oregon State Historic Preservation Office (SHPO), the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Confederated Tribes of the Yakama Nation with respect to potential Project impacts on such resources in the Project’s vicinity. Based on the results of that survey, BPA determined that the Project would have

no adverse effect on historic resources. The Oregon SHPO concurred with this assessment on July 22, 2022. BPA did not receive a response from the other parties that it consulted during this process.

12. Socioeconomics and Environmental Justice

The effects of this restoration project along Baldwin Creek would be consistent with the analysis in Section 3.3.10 of the Programmatic EA (“Socioeconomics and Environmental Justice”). Section 3.3.10.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Socioeconomics and Environmental Justice”) describes low socioeconomic and environmental justice impacts.

As described in the Programmatic EA, the Project would not require additional permanent employees nor would it require individuals to leave or relocate to the local area. There would also be no effect on housing available for local populations, as the Project would not displace people or eliminate residential suitability of lands in or near the Project area. The Project would generate short-term employment for those directly implementing the restoration actions and would provide small short-term cash inputs to local businesses for fuel, equipment, and meals. This degree of effect would be low.

There are no environmental justice populations present that could be affected, as the Project and its impacts are limited to the lands on which they are located, with no anticipated offsite effects that could impact environmental justice populations elsewhere.

13. Climate Change

The effects of the Project in and along Baldwin Creek are consistent with the analysis in Section 3.3.10 of the Programmatic EA (“Climate Change”). Section 3.3.10.3 of the Programmatic EA (“Effects Conclusion for the Proposed Action on Climate Change”) describes low impacts on climate change.

Due to the short duration of construction and the relatively small number of construction vehicles that would be involved, temporary emissions associated with Project construction are anticipated to be low. The Project would have a low level of greenhouse gas production and its contributions to climate change would be correspondingly minimal, consisting of short-term emissions from motorized equipment operations during implementation of the restoration actions. Further, these emissions would be offset to some degree by the ameliorating effects of restored floodplain function, such as increased water table inputs, increased carbon sequestration in expanded and improved riparian wetlands, and decreased water temperatures from improved instream and riparian habitat conditions. The overall contribution to climate change and greenhouse gas production would be low, which is consistent with the Programmatic EA.

Findings

BPA finds that the types of actions and the potential impacts related to the proposed Baldwin Creek Fish Passage and Habitat Enhancement Habitat Enhancement Project are similar to those analyzed in the Columbia River Basin Tributary Habitat Restoration Programmatic Environmental Assessment (DOE/EA-2126) and Finding of No Significant Impact. There are no substantial changes in the Programmatic EA's Proposed Action and no substantial new circumstances or information about the significance of the adverse effects that bear on the analysis in the Programmatic EA's Proposed Action or its impacts within the meaning of 10 CFR § 1021.314 and 40 CFR § 1502.9. Therefore, no further NEPA analysis or documentation is required.

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Concur:

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